## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001714 Address: 333 Burma Road **Date Inspected:** 14-Mar-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Fu Yu Hong **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

# **Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA inspector performed 15 % ultrasonic testing (UT) after ZPMC verifications on areas selected and tested by ZPMC on the partial penetration joint at the junction of the deck panel DP-057-001 to the U- ribs weld joints # 1 thru 5.

ZPMC found lack of penetration that results on depth of penetration less than the minimum of 9.6 mm and the QA inspector verified the indications on weld joints. See the UT report TL\_6027 generated on this date.

### PMTs UT testing

- 1. The QA inspector performed 100 % ultrasonic testing (UT) to the partial penetration joint on the production monitoring test (PMT) welded for the deck panel DP-075-001 weld joints # 1 thru 6 after ZPMC completed their verifications at the areas selected and tested by ZPMC. See the UT report TL\_6027 generate this date. The QA inspector found that this PMT had welds with depth of penetration less than 80 % with length that exceed 25 mm. ZPMC accepted the PMT for the deck panel DP-075-001.
- 2. The QA inspector performed 100 % ultrasonic testing (UT) to the partial penetration joint on the production monitoring test (PMT) welded for the deck panel DP-039-001 weld joints # 1 thru 6 after ZPMC completed their verifications at the areas selected and tested by ZPMC. The QA inspector found after testing the welds ultrasonically that welds appeared to be in compliance with the contract documents and with the ZPMC, ABF and

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#### Caltrans.

- 3. The QA inspector performed 100 % ultrasonic testing (UT) to the partial penetration joint on the production monitoring test (PMT) welded for the deck panel DP-77-001 and DP-038-002, weld joints # 1 thru 6 after ZPMC completed their verifications at the areas selected and tested by ZPMC. The QA inspector found after testing the welds ultrasonically that welds appeared to be in compliance with the contract documents and with the ZPMC, ABF and Caltrans, agreement for testing with UT method the PMTs. See the UT report TL\_6027 generated on this date. See the UT report TL\_6027 generated on this date.
- 4. The QA inspector performed 100 % ultrasonic testing (UT) to the partial penetration joint on the production monitoring test (PMT) welded for the deck panel DP-080-001, weld joints # 1 thru 6 The QA inspector found after testing the welds ultrasonically that welds appeared to be in compliance with the contract documents and with the ZPMC, ABF and Caltrans agreement for testing with UT method the PMTs. See the UT report TL\_6027 generated on this date.

## **Summary of Conversations:**

The QA inspector did not have any relevant conversation on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer